

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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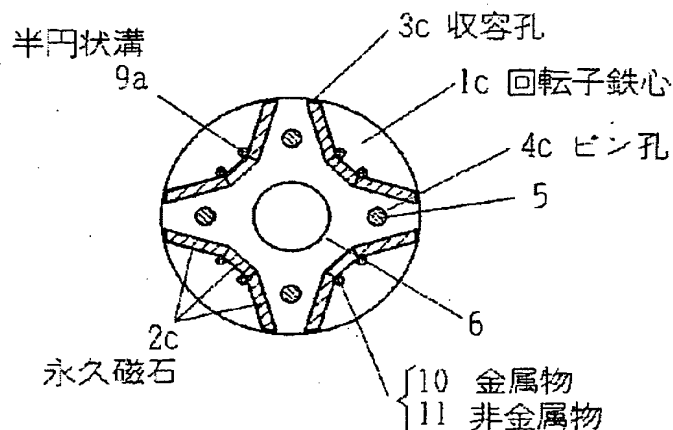
APPLICATION DATE : 24-05-00  
APPLICATION NUMBER : 2000193552

APPLICANT : AICHI EMERSON ELECTRIC CO LTD;

INVENTOR : HORIE TETSUO;

INT.CL. : H02K 1/27 H02K 1/22

TITLE : PERMANENT MAGNET ROTOR FOR MOTOR



**ABSTRACT :** PROBLEM TO BE SOLVED: To solve the problems that a permanent magnet is cracked or chipped by its movement in an accommodation hole of a permanent magnet rotor while a motor is running, and that the motor as a product cannot be supplied stably in performance and quality by noise or vibration generated while the motor is running.

**SOLUTION:** This rotor includes the accommodation hole for embedding the permanent magnet into a rotor core having an axial hole in the permanent magnet and is formed with semi-circular grooves adjacent to the accommodation hole. The permanent magnet is secured inside the accommodation hole by inserting a metal body or nonmetal body for fixing the permanent magnet in the semi-circular groove. In the rotor of which the accommodation hole for embedding the permanent magnet has a roughly recessed shape, the semi-circular groove is formed so as to be adjacent to the side of an accommodating hole corner section. By inserting the metal body or nonmetal body, uniform force can be applied to the rotor core and the permanent magnet in the accommodating hole, thereby attaining stable retaining force.

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